

## **ChatDB – Taking to Database Management Systems using Natural Language Midterm Progress Report**

### **I. Team Details**

Members:

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### **II. Implementation Questions**

1. Tech Stack Used  
pymysql, mysql-connector-python, firebase-admin, pymongo, ollama
2. Query Syntax Implementation Plan  
We will utilize Llama 2 to convert natural language to database queries.
3. Database Selection
  - SQL: MySQL
  - NoSQL: Firebase, MongoDB

### **III. Planned Implementation**

So far, there are no deviations from the original proposal. We remain implementing Llama 2 to transform natural language into database queries, focusing on MySQL, Firebase, and MongoDB.

### **IV. Project Status**

We have successfully tested the feasibility of converting natural language to MySQL queries using the Llama 2 model on simple queries. For example, converting "Find the names of all employees who earn more than \$50,000" to "SELECT name FROM employees WHERE salary > 50000;".

For the next steps, we plan to extend natural language conversion to support Firebase and MongoDB and ensure our model supports all common constructs in both SQL and NoSQL databases. Following on, we will develop the web-based UI platform allowing users to interact with ChatDB.

